Smith (A. L.)

A PLEA

FOR THE

Extra-Peritoneal Treatment of the Stump in Abdominal Hysterectomy for Fibroids,

BY

A. LAPTHORN SMITH, B.A., M.D., M.R.C.S., E., F.O.S. L.

Lecturer on Gynecology, in Bishop's College; Surgeon to the Woman's Hospital; Gynecologist to the Montreal Dispensary.

[Reprinted from CANADA LANCET, January, 1891.]

TORONTO:

DUDLEY & BURNS, 11 COLBORNE ST.,
1891.

A PLEA

FOR THE

Extra-Peritoneal Treatment of the Stump in Abdominal Hysterectomy for Fibroids,

BY

A. LAPTHORN SMITH, B.A., M.D., M.R.C.S., E., F.O.S. L.

Lecturer on Gynecology, in Bishop's College; Surgeon to the Woman's Hospital; Gynecologist to the Montreal Dispensary.

[Reprinted from CANADA LANCET, January, 1891.]

TORONTO:

DUDLEY & BURNS, 11 COLBORNE ST.,

1891.

ABDOMINAL HYSTERECTOMY FOR FIBROID TUMORS OF THE UTERUS.*

BY A. LAPTHORN SMITH, B. A., M. D., M. R. C. S., ENG.

At the outset of my paper, I wish to correct a possible misunderstanding which may arise from my reading a paper at all on the "Operative Treatment of Fibroids and Myomas." Because I do so, I do not wish it to be understood that I have in any way lost faith in the electrical treatment, used with a definite object in certain particular cases. Neither by reading this paper do I mean to advise that fibroids and myomas should be treated by operation at all, except in certain special conditions. Where pain or bleeding, or pressure symptoms are the reasons for the patient consulting us, I believe still that in the majority of cases, the careful application of the galvanic current under rigid antiseptic precautions, will relieve and even permanently cure in most cases all the symptoms. It is only in cases in which the tumor has come under observation, after it has attained enormous dimensions, or in cases in which there is some doubt, without an explora-

* Read before Med. Chirurg. Society, Montreal, 21st Nov., 1890.

ory incision, whether the tumor is really a fibroid or myoma at all, that I would advise operative treatment. Seeing that operative treatment is sometimes required and that those who operate are in doubt as to what method of operation to adopt, it is the object of my paper to urge them and those who send patients to them, to adopt the extra-peritoneal method of treating the stump.

We must remember, as has been said over and over again, that fibroid tumors rarely if ever cause death and before exposing the patient to the risk of an operation, the mortality of which varies all the way from two or three to fifty per cent., according to the method adopted of treating the pedicle, the conscientious adviser must feel sure that he has exhausted every other and less fatal method of affording relief or cure. Supposing that this has been done without avail, and that some form of operative procedure, owing to the size of the growth, is imperative, the removal of the appendages or Tait's operation will certainly offer the least risk, although it must be remembered that it, like electricity, is in the majority of cases, only palliative and not curative. Moreover, in undertaking the removal of the appendages, we are never sure whether the operation may not terminate in hysterectomy; for in large fibroids, the appendages are sometimes so difficult to get

at and to remove, that the taking out of the whole tumor with them, offers a greater chance of success.

The next question of importance which presents itself for consideration is, that, having decided upon the advisability of performing abdominal hysterectomy, what method of operating offers the greatest certainty of success, by success, meaning, of course, recovery from the operation.

After having examined carefully the statistics of the principal operators, and judging also from my own personal observation of the results of these operations in Paris, Berlin, New York, Philadelphia and Montreal, I have come to the very decided conclusion that there is only one safe way, that is, with Koeberle's serre nœud, Tait's pins, and the extra-peritoneal treatment of the stump. . . . I have seen several deaths following operations in which the stump, after having been carefully sewed up, was dropped into the peritoneal cavity; some of these deaths being due to concealed hemorrhage, because the drainage tube was not used, and others being due to peritonitis; while I have not seen one death follow in any case in which the stump was brought outside the peritoneal cavity. The time required for the completion of the operation is much less, and the ease with which the operation

Secondly, the *intra-peritoneal* method requires the leaving in the peritoneum or at least in the cut uterus, a considerable quantity of animal ligature, which in the process of manufacture has gone through putrefaction. Of course this is supposed to have been sterilized, but I am informed by Dr. Marcy, of Boston, that he has had several deaths from peritonitis, following his operations for cure of hernia; and on investigation he found that the so-called sterilized catgut was reeking with the germs of putrefaction.

In a matter of such vital importance, it is well for us to take the opinion of men who have had large experience; for, as a rule, experience in surgery is purchased at the price of life. Bantock, in the *British Medical Journal* for May, 1890, in discussing the matter, says certain cases of pedunculated fibroid might be treated by ligating and dropping the the pedicle, but some pedicles would be insecure and dangerous, no matter how carefully they were tied. He had tried both plans, and it was his want of success with the ligature that had led him to have recourse almost invariably to the *extra-peritoneal* treatment. He had used the most powerful forceps; had compressed the pedicle to an eighth of its original volume; had applied the double ligature; and had even stitched the peritoneal edges

is performed is much greater in the extra-peritoneal method. This element of time required for an operation is a very important one. I believe the risk of any abdominal operation is, other things being equal, in direct ratio to the time required. Part of this danger may be due to anæsthesia, which itself is a serious matter, and partly to the more prolonged pressure and manipulation of the intestines. This is so much the case that one may almost say with certainty that in abdominal operations which can be performed without the intestines being seen, with an opening only large enough to admit one or two fingers, and which only require 10 or 15 minutes for performance, the death rate will only be about 2 per cent.

In the *intra-peritoneal* method, the stump must be constricted by a rubber band or some other force, while the tedious suturing of the stump is going on. This constriction of blood vessels, it is well known, as in cases where the Esmarch bandage is used on the limbs, is generally followed by paralysis of the blood vessels and consequent oozing, probably due to injury of the *vaso motor* nerves, so that the experience of many operators is that it is the rule to have oozing from the stump, no matter how carefully the borders are approximated.

together, yet before the operation had been completed, oozing had often begun. He insisted on the fact that patients did not usually die from the hæmorrhage, as such, but from septicæmia due to the decomposition of the ooze. That was why the use of the drainage tube was advised. He would be very glad if a method could be devised to overcome the difficulties and drawbacks, as the recovery took much less time; but he had heard of no method which would give such assurance against hæmorrhage as that obtained from the extra-abdominal method.

Lawson Tait, in the same journal, holds that even the most tempting looking pedicles can not be relied on, because the uterine tissue is so laden with serum, that even if tied ever so tightly, it would begin to bleed in twenty-four hours. He had tied some 6,000 pedicles, and while he has never had hæmorrhage from ovarian pedicles, except in one or two cases, it was quite another thing with the pedicles of fibroids. He regretted nothing so much as having been induced to try the intra-peritoneal treatment of the pedicle. Even hydraulic pressure would not render them secure, and he had employed pressure up to three tons. At present all that his nurses had to do was to give a turn to the clamp whenever oozing set in. They were not secure until the

lapse of 80 or 90 hours. It was true that certain cases might be safely treated by ligature, but it was impossible to distinguish them prior to operation.

Joseph Price, of Philadelphia, advocates the dry extra-peritoneal treatment of the pedicle. After the clamp is applied, the stump is cut off and trimmed down so far as seems compatible with safety. The stump is then drawn down into the lower angle of the incision, and its peritoneal covering above and below the wire, stitched to the abdominal peritoneum, two or three stitches being all that is required. This shuts out all possible chance of sepsis. A dry dressing of iodoform gauze is applied. Other antiseptic powdered substances, such as salicylic acid or subnitrate of bismuth may be used if desired. In case of large succulent stumps, the bichloride may be directly applied. The result of this treatment is that the stump is completely mummified, and in a few days, varying according to the progressive tightening of the clamp, drops off without odor or discharge. That absolute safety may be assured, it is of the greatest importance that a reliable wire be used. The daily tightening of the clamp keeps up a constant strain on the metal, while at the same time it brings the wire into a greater curvature. The metal must, therefore, be pliable,

but strong, and not ductile as copper. For this purpose he prefers the Delta metal.

Howard Kelley recommends constriction of the pedicle by the elastic ligature, amputation of the tumor so as to leave a cupped surface to the stump, then a careful suture of the raw surfaces of the stump, leaving the ends of the sutures long: then suturing off the stump into the lower angle of the abdominal wound. In cases of hæmorrhage or oozing, the long suture ends allow the stump to be easily brought into sight. Whether this improvement of his has diminished his mortality or not, I am unable to say, but I see by the last reports on gynecology of the Johns Hopkins Hospital (*British Medical Journal*, Oct. 11th, 1890, page 848), that of the six hysterectomies for fibroids performed in that hospital between October, 1889, and March, 1890, there were three deaths or a mortality of 50 per cent. On the other hand, at the recent meeting of the American Association of Obstericians and Gynecologists at Philadelphia, Dr. Joseph Price reported the wonderful record of twenty-six consecutive abdominal hysterectomies without a death. The method which he invariably employs, being the extra-peritoneal treatment of the stump with Kœberle's serre nœud and transfixing pins (*Buffalo Medical and Surgical Journal*, Nov. 1890, page 222).

Fritsch, at the 10th International Congress (*American Journal of Obstetrics*, 1890, page 1166) summed up the whole question, to my mind, very clearly, when he said: "The different methods of operation are immaterial in view of the question whether the mode is to be intra-peritoneal or extra-peritoneal."

Only three objections to this method, are of importance which are:

First, that the dragging of the stump up to the lower angle of the abdominal incision causes, in some cases, obstruction of the rectum, but I have never seen this occur to such an extent as not to be easily overcome by a turpentine enema, which by distending the rectum, allows the free escape of gas.

The second objection is that in some cases, the tumor extends so far down in the cervix as to render it impossible to get a pedicle, but even in this case, the same method holds good, for it is only necessary to transfix it, no matter how large, with Tait's pins, or even two knitting needles, and to set a wire around it, when, even if it were the size of the thigh, it could be greatly compressed. Besides, it is just in these cases in which shrinkage is greatest after an operation, that consequently the danger would be greatest of sewing up the stump and dropping it

into the abdominal cavity. It can be watched, and as it shrinks, the wire can be occasionally tightened, if rendered necessary by bleeding.

The third objection is that there is sometimes downward sloughing of the stump; but this I believe can always be avoided by not tightening the wire more than just barely enough to control hæmorrhage but leaving the screw always accessible, so that it may be tightened if necessary.

Drainage.—One of the greatest secrets of success in abdominal operations, is without doubt, the realization of the absolute necessity of leaving in a drainage tube in every case in which adhesions have been torn, and in which consequently, there will be oozing into the peritoneal cavity. It is quite true that the peritoneum, if left unhampered with opium in any shape or form, may be able to dispose of a large amount of exudation, more especially if it is drained through the walls of the intestines, by the passage through the latter of a denser saline fluid towards which the peritoneal liquids will flow by osmosis. But, nevertheless, the risk of leaving the liquid in the peritoneal cavity to putrefy, is too great for any one to run. As Tait has recently shown, there are germs everywhere, even in the peritoneal cavity during an operation; but they will be apparently harmless if there be nothing there on

which to germinate. Germs cannot live on air, they must have dead organic matter to subsist on; so that instead of germicides, Tait and all his school depend rather on leaving the abdominal cavity clean, and keeping it so.

Looking over the death rate of abdominal hysterectomy, we notice that the greatest run of successful cases are in the practice of men such as Joseph Price, who, as I have said, has recently reported a run of 26 consecutive cases, without a death, and who, at a recent meeting of the American Association of Gynecologists, stated that when he was in doubt, he always drained, and significantly adds he always tried to believe himself in doubt.

Some objections have been made to the use of the drainage tube, but they are mostly theoretical, and easily disposed of, the principal one being the risk of hernia following removal of the tube. This can easily be guarded against, by placing an extra loose suture in the middle of the space to be occupied by the tube, and which on the removal of the tube can be drawn tight and tied. I have never seen hernia follow a case in which the drainage tube was used for a few days, while I have seen several cases of hernia in cases in which it was not used at all.

The other objection is, that it may cause injury

to the intestines, especially the rectum by the pressure upon it, but if care is taken to use a tube just long enough to dip into Douglas' cul-de-sac and no more, and to use no compression upon the external extremity, but, on the contrary, to leave the tube floating freely in the cul-de-sac, there will be no danger from this source. In some cases, I believe, death has followed the removal of the drainage tube while oozing was still going on.

The rule to follow is: As long as the amount of fluid pumped from the tube exceeds one drachm for four hours, the drainage tube should be left in.

I see only one possible improvement on the extra peritoneal treatment of the stump, and that is to have no stump at all. Two or three methods of attaining this object have been suggested and put in actual practice. One consists in first removing the bulk of the tumor by abdominal section, after having placed an elastic ligature around the cervix; then dropping the stump into the pelvis and temporarily closing the abdominal wound; and then proceeding to remove the stump by vaginal hysterectomy, which, owing to the much smaller bulk to be removed, is very much easier than vaginal hysterectomy in any other condition. In doing this, lock compression forceps may be used to arrest hæmorrhage from the

remains of the broad ligament, and considerably shorten the duration of the operation. This, I believe, is destined to become the ideal operation for the removal of large fibroids. It was first advocated, I believe, by Dr. A. Mary Dickson Jones, of Brooklyn, who recently sent a communication in which she reports several successful cases in which this method was followed. The operation has not been done, however, often enough to speak so decidedly about it as we can about the extra-peritoneal method, and, therefore, until the combined method of abdominal and vaginal hysterectomy has been more thoroughly tried, I urge upon any who do hysterectomy for fibroids at all, to use the safe and in every way satisfactory method of the extra-peritoneal treatment of the stump.